

The State of New Hampshire

Department of Environmental Services



Michael P. Nolin Commissioner

> February 15, 2006 **Letter of Deficiency** DSP#06-003

Mr. Samuel Greene 785 Gilmore Pond Road Jaffrey, NH 03452-6102

RE: Wild Life Pond Dam #124.19, Jaffrey

Dear Mr. Greene:

The Department of Environmental Services, Dam Bureau (DES) consistently strives to enhance the safety of dams in New Hampshire through its dam safety program. One of the many instruments that play a part in reaching this goal is our inspection program. DES is forwarding this correspondence to you to advise you that in accordance with RSA 482:12 and Env-Wr 302.02, an inspection of the subject dam was conducted on October 21, 2005. In addition a review of the previous Letter of Deficiency (LOD) dated July 9, 2001 was completed with the following observations:

- The upstream and downstream embankments and the emergency/overflow spillway of the dam
 are overgrown with small trees and brush. It appears that the upstream and downstream
 embankments have been cut with some re-growth and it does not appear that the
 emergency spillway has been cleared of brush and tree growth since the previous
 inspection;
- 2. Along the left embankment of the emergency spillway and near the downstream embankment of the dam there exists a low section which during times of high flood, as determined with our hydraulic analysis of the dam, could direct water towards the toe of the downstream embankment/abutment. This remains an issue and is in need of repair;
- 3. A deep erosion area exists perpendicular to the flow path spanning the width of the spillway near the outlet end of the emergency/overflow spillway 30-40 yards downstream of the toe of the dam, just prior to re-entry into the river. The scour hole remains and appears to be larger than previously observed. An additional smaller scour hole area has developed approximately ¾ quarters downstream along the easterly side of the spillway;
- 4. The last 4 feet riveted section of the cmp outlet is deteriorated and peeling off. Four feet upstream and within the outlet pipe the metal appears to be in good condition and flowing well. It should be noted that at least 3 feet of intact pipe remains exposed away from the toe of the dam. The pipe remains deteriorated and appears to have further deterioration;
- 5. The drop inlet has been damaged and the pond is approximately 6 inches lower than normal. It should be noted that the damage is minimal and does not diminish the safety of the dam. The damage remains and it was unclear if further deterioration has taken place as a boat was lodged in the inlet impeding flow and further inspection. The boat was reported to have been removed from the drop inlet;

DES Web site: www.des.nh.gov

Letter of Deficiency Dam #124.19/DSP#06-003 February 15, 2006 pg 2

- 6. The stoplogs to the drop inlet are leaking in several locations and appear to be deteriorated to the point of replacement. This was not observed on this date but likely remains in disrepair;
- 7. There was a small leak at the connection between the drop inlet and the outlet pipe. This could not be observed on this date; and
- 8. There was no operation and maintenance plan (O&M) on file with DES.

DES believes that the above deficiencies can be corrected by performing the following items by the indicated schedule:

June 1, 2006:

- 1. Remove the tree and brush growth from the upstream and downstream embankments and the emergency/overflow spillway;
- 2. Prepare and submit to the DES a written O&M plan. The plan should describe the control of impoundment levels, monitoring and maintenance procedures, and identify emergency contact personnel;

October 1, 2006:

- 3. Increase the height of the embankment separating the emergency/overflow spillway and the toe of the downstream embankment/abutment to within one foot of the top of the dam to eliminate the possibility of flow being directed in this location;
- 4. Repair the scour hole and additional smaller scour hole within the emergency spillway. It should be noted that any repair must be approved by the DES, Dam Bureau;
- 5. Repair or replace the deteriorated section of steel pipe or possibly slip line the existing pipe. Any repair will have to be approved through our office and may require a dam reconstruction permit; and
- 6. Replace the deteriorated existing stoplogs and if necessary formulate a plan to repair/replace the drop inlet and associated leak between the drop inlet and outlet pipe.

DES is requesting that you complete and submit the attached "Intent to Complete Repairs" form, within 30 days of receipt of this letter, that will provide for correction of the identified deficiencies by the date(s) indicated above. Please call or write to our office if the repairs are completed ahead of the aforementioned schedule so that DES may schedule a follow-up inspection. Unless notified otherwise, DES will conduct the follow-up inspection on or after the date(s) indicated above. If you believe changes to the items of work or dates are necessary, please make the changes directly on the form and provide a brief explanation. We have enclosed a self addressed stamped envelope for you to return this form.

Letter of Deficiency Dam #124.19/DSP#06-003 February 15, 2006 pg. 3

If the repairs are not completed within the referenced schedule further enforcement action will be initiated.

Our intent in sending you this correspondence is to make you aware of items that DES believes warrant your attention to insure the continued safe operation of your dam. It is our hope that, through the submittal of the attached form and a commitment to keeping a well-maintained dam, you will voluntarily comply with the requested items of work. If we do not receive the intent form or a similarly adequate written reply, we will assume that you are in agreement with our findings and recommendations and DES will carry out follow-up inspections accordingly.

If you have any questions or comments regarding this Letter of Deficiency or would like to be present at future inspections, please contact me at 271-3406, or write to the Water Division at the address listed on the bottom of the cover page.

Sincerely,

Dale F. Guinn, P.E. Dam Safety Engineer